

## Going Buggy – Teacher Pre-visit information

### Concepts

Changes organisms go through during their life form a pattern. Even though insects might look very different at first glance, there are actually many similarities between them. All insects have specific characteristics that make them insects.

### Program Activities

The indoor introduction distinguishes between vertebrates and invertebrates. Characteristics of an insect are taught and reviewed with an exploration of different samples and an activity where students make an original model of an insect.

During the outdoor hike, students will explore the three roles that invertebrates play in our ecosystem.

### Previsit Suggestions

Read *Insects* by Robin Bernard

Briefly discuss the difference between vertebrates and invertebrates. Introduce students to the basic parts of an insect.

Walk around the schoolyard and look for insects and other invertebrates and examine them closely. Find different places insects may hide and discuss their importance to people, plants, and other animals.

### Vocabulary

**Exoskeleton** – hard, protective casing on the OUTSIDE of an invertebrate's body

**Head** – the segment of an insect body that bears the mouthparts, compound eyes, and antennae

**Thorax** – the midsection of an insect's body where the legs and wings are attached

**Abdomen** – the segment of an insect's body that contains the major internal organs

**Decompose** - a natural process by which matter is broken down

**Insect** – an invertebrate with three body segments, three pairs of legs, and one pair of antennae

**Invertebrate** - an animal without a backbone

**Pollinators** - Insects that take pollen from one flower to another

**Vertebrate** – an animal with a backbone.





Howard County  
RECREATION & PARKS

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## *Going Buggy – Teacher Post-visit information*

Dear Teacher,

We hope you enjoyed your recent field trip to the Robinson Nature Center. To help with follow-up in the classroom, we have developed the following post-visit materials:

- 1) Follow-up discussion
- 2) Follow-up activities

### Follow-up Discussion

- 1) Review the difference between vertebrates and invertebrates
  - a. A vertebrate is an animal with a backbone
  - b. An invertebrate is an animal without a backbone
- 2) What makes an animal an insect?
  - a. All insects are invertebrates
  - b. 3 body parts (head, thorax, abdomen)
  - c. 6 legs
  - d. 2 antennae
  - e. Compound eyes
  - f. Exoskeleton
- 3) What part of an insect contains the internal organs?
  - a. Abdomen
- 4) What gives an insect's body structure and support?
  - a. Exoskeleton
- 5) What does an insect use its antennae for?
  - a. Smelling
  - b. Feeling
- 6) Why are insects important?
  - a. Food for other animals (skunk, birds, mole, shrew, fish, bats, other insects)
  - b. Help to pollinate fruit trees, commercial crops, flowers
  - c. Decomposers help to break down material and return nutrients to the soil.
- 7) Give an example of an invertebrate that is not an insect.
  - a. Earthworms
  - b. Centipedes
  - c. Millipedes
  - d. Rolly Pollies/pill or sow bugs
  - e. Spiders
- 8) Give examples of habitat where invertebrates can be found
  - a. Garden
  - b. Forest
  - c. Stream

### Follow-up Activities

- 1) Study the life cycle of a particular insect by:
  - a. Raising painted lady butterflies (available through Delta Education)
  - b. Raising meal worm colonies (available through pet stores)
- 2) Explore places in the schoolyard that could be insect habitats. Discuss how these locations provide:
  - a. A good place for shelter
  - b. Food sources
  - c. A warm/cool place (depending on weather)
  - d. Safety from predators
- 3) Insects have many important roles that influence our lives. See how many “good” and “bad” things your class can list.

